

Amendments to the Claims:

This claim listing will replace all prior versions and listings of claims in the application.
Please amend Claims 8, 9, 10, 12, 14, 16, 20 as follows:

Claim Listing:

Claims 1-5 (canceled)

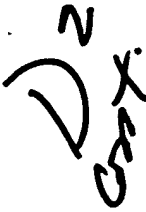
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6. (previously presented) A magnetic field sensor as described in Claim 8, wherein the detectable voltage signal is indicative of the rotation of a rotor.
 7. (previously presented) A sensor as described in Claim 6, wherein the rotation of the rotor is indicative of a fluid flow, where the magnetic rotor is located in the flow path of, and is turned by, the flow of the fluid.
 8. (currently amended) A magnetic field sensor comprising ~~a multilayer material, the multilayer material comprising a layer of~~ a magnetostrictive material in contact with a ~~layer of~~ a piezoelectric material, and ~~the multilayer material~~ configured such that, when the magnetostrictive material is subjected to an alternating magnetic field, a change in at least one dimension of the magnetostrictive material induces a strain in, and produces a detectable voltage signal in, the piezoelectric material, and wherein during operation the magnetic field sensor does not consume any external electrical power; and wherein the magnetic field sensor comprises a multilayer structure having a single layer of a first one of the magnetostrictive and piezoelectric material, and one or more layers of the second one of the magnetostrictive and piezoelectric materials.
 9. (currently amended) The magnetic field sensor as described in Claim 8, wherein the multilayer ~~material~~ structure comprises a single layer of piezoelectric material and two

layers ~~a second layer~~ of magnetostrictive material positioned so that the layer of piezoelectric material lies between the two layers of magnetostrictive material.

10. (currently amended) The magnetic field sensor as described in Claim 8, wherein the multilayer ~~material~~ structure comprises a single layer of magnetostrictive material and two layers ~~a second layer~~ of piezoelectric material positioned so that the layer of magnetostrictive material lies between the two layers of piezoelectric material.
11. (previously presented) A magnetic field sensor as described in Claim 8, wherein the detectable voltage signal is indicative of an electrical current in an electrical conductor.
12. (currently amended) A magnetic field sensor as described in Claim 8, additionally comprising a high impedance readout circuit, connected to ~~the~~ a layer of piezoelectric material, wherein a sensitivity of the sensor is proportional to a thickness of the piezoelectric layer and substantially independent of a surface area of the multilayer ~~material~~ structure.
13. (previously presented) A magnetic field sensor as described in Claim 8, wherein the sensor is supported as a cantilever in which one end of the sensor is allowed to strain freely to thereby increase the sensitivity.
14. (currently amended) A magnetic field sensor as described in Claim 8, wherein ~~the~~ a layer of magnetostrictive material comprises a substrate.
15. (original) A magnetic field sensor as described in Claim 14, wherein the magnetostrictive material is a ferrite.
16. (currently amended) A magnetic field sensor as described in Claim 14, wherein ~~the~~ a layer of piezoelectric material comprises at least one patterned stripe of electrically insulating piezoelectric material.

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cont

17. (original) A magnetic field sensor as described in Claim 16, wherein the magnetostrictive material is a ferrite.
18. (previously presented) A magnetic field sensor as described in Claim 16, wherein the layer of piezoelectric material comprises at least two stripes of piezoelectric material connected electrically in series.
19. (original) A magnetic field sensor as described in Claim 18, wherein the magnetostrictive material is a ferrite.
20. (currently amended) A magnetic field sensor as described in Claim 8, wherein the multilayer ~~material~~ structure comprises a read head for reading stored information on a recording medium.
21. (original) A magnetic random access memory device comprising an array of element cells, each of which comprises a structure including at least one piezoelectric layer and at least one magnetostrictive layer, wherein a word line and a sense line connect to the element cells.
22. canceled.
23. (previously presented) A magnetic field sensor comprising a magnetostrictive material in contact with a piezoelectric material, the sensor having a field sensitivity larger than approximately 10 mV/Oe.
24. (previously presented) A magnetic field sensor as described in claim 8, wherein the magnetostrictive material is a metal alloy.



25. (previously presented) A magnetic field sensor as described in Claim 8, wherein the field sensitivity of the magnetic field sensor is at least 5 mV output signal per Oe of applied magnetic field.

26. (previously presented) A magnetic field sensor as described in Claim 8, wherein the field sensitivity of the magnetic field sensor is at least 10 mV output signal per Oe of applied magnetic field.

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